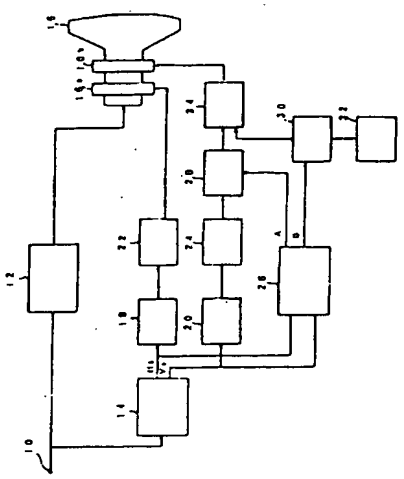
(54) SCANNING LINE WIDTH CORRECTING METHOD
(11) 4-246684 (A) (43) 2.9.1992 (19) JP
(21) Appl. No. 3-31629 (22) 31.1.1991
(71) SONY TEKTRONIX CORP (72) TETSUO ICHIKAWA
(51) Int. Cl[5]. G09G1/16,G09G1/04,H04N3/34

PURPOSE: To remove a lateral stripe pattern on a screen in the gap area between scanning lines and to excellently correct the gap between scanning lines even when the number of scanning lines is decreased to 1/n times (n: interger) of a maximum value.

CONSTITUTION: The number (n) of scanning lines is found from the horizontal and vertical synchronizing signals H_S and V_S of an input video signal and when the (n) is smaller than the maximum number N of scanning lines which can be displayed on a display device, namely, when there are gap areas generated between the scanning lines, an electron beam is polarized vertically with a high frequency signal together with a vertical saw-tooth wave signal and vibrated vertically on the screen to apparently increase the width of each scanning line on the screen. Therefore, the electron beam strikes on even the gap areas formed owing to a decrease in the number of scanning lines to solve the problem that an image becomes unclear owing to the lateral stripe pattern of the gap areas.

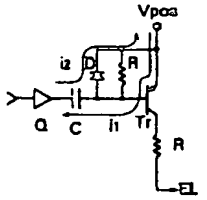


12: video amplifier, 14: synchronizing signal separating circuit, 18: horizontal oscillation circuit, 20: perpendicular oscillating circuit, 22: horizontal deflecting circuit, 24: perpendicular deflecting circuit, 26: control circuit, 28: multiplier, 30: multiplier, 32: high frequency wave generator, 34: adder

(54) DRIVING CIRCUIT FOR DISPLAY ELEMENT
(11) 4-246685 (A) (43) 2.9.1992 (19) JP
(21) Appl. No. 3-11275 (22) 31.1.1991
(71) HITACHI CHEM CO LTD (72) FUMIO INOUE(1)
(51) Int. Cl[5]. G09G3/12,G09G3/00,G09G3/30

PURPOSE: To structure a driving circuit for the display element which uses no transformer and is low in power consumption and to simplify the circuit constitution.

CONSTITUTION: An AC coupling composed of a capacitor C is provided on a path for supplying a base current to a transistor TR used as a switching element charges are applied to a capacitive display medium layer. The AC coupling, therefore, supplies the base current to the transistor TR used as the switching element. For the purpose, at least either of a current limiting resistor and a discharging diode is interposed between the base and the emitter of the transistor TR is series or in parallel to structure the low-power-consumption circuit which eliminates the need for a transformer.



(54) DRIVING CIRCUIT FOR MATRIX DISPLAY DEVICE
(11) 4-246686 (A) (43) 2.9.1992 (19) JP
(21) Appl. No. 3-11279 (22) 31.1.1991
(71) HITACHI CHEM CO LTD(1) (72) FUMIO INOUE(3)
(51) Int. Cl[5]. G09G3/20,G09G3/30

PURPOSE: To decrease the number of driver ICs in use and to use only one high-voltage power source to drive column-side and row-side electrodes.

CONSTITUTION: Driver ICs 4, 2, and 3 of function constitution including switching circuits having a push-pull function are provided on the column-side and row-side electrodes of a thin film EL panel 1. The pull-up side common line of the drier IC 4 is connected to a positive modulation power source through a switch (diode 8) and the pull-down side common line is connected to a negative modulation power source through a switch 11; and the pull-up side common lines of the driver ICs 2 and 3 are connected to the positive modulation power source through a switch 9, a write power source, and a switch 10 and the pull-down side common lines are connected to a reference potential.